Applicant: Detlef Weber Attorney's Docket No.: 12816-021001 / S1166 SB/flu

Serial No.: 09/898,909
Filed: July 3, 2001

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## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

## 1-13 (Cancelled)

- **14.** (Withdrawn) A metallization arrangement for a semiconductor structure, said metallization arrangement comprising:
  - a first substructure plane;
  - a second metallization plane having a first interconnected and a second interconnect separated from said first interconnect by an interspace;
  - a first intermediate dielectric for providing electrical insulation between said first substructure plane and said second metallization plane;
  - a wall forming a via hole through said intermediate dielectric, said via hole connecting said first substructure plane and said second metallization plane and being filled with a conductive material;
  - a liner layer made of a dielectric material, said liner layer being disposed between said second metallization plane and said first substructure plane, and being interrupted by said interspace that separates said first interconnect and said second interconnect.
- 15. (Withdrawn) The metallization arrangement as claimed in claim 14, wherein said first substructure plane comprises a first metallization plane.
- **16.** (Withdrawn) The metallization arrangement as claimed in claim **15**, wherein said first metallization plane comprises ALCu.

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17. (Withdrawn) The metallization arrangement as claimed in claim 15, wherein said second metallization plane comprises ALCu.

- 18. (Withdrawn) The metallization arrangement as claimed in claim 14, further comprising a second intermediate dielectric occupying at least a portion of said interspace.
- 19. (Withdrawn) The metallization arrangement as claimed in claim 14, wherein said semiconductor structure comprises an electrical circuit integrated in a silicon substrate.
- 20. (Withdrawn) The metallization arrangement as claimed in claim 14, wherein said liner layer comprises a material selected from the group consisting of silicon dioxide and silicon nitride.
- 21. (Previously Presented) A method for fabricating a metallization arrangement for a semiconductor structure, said method comprising:

providing a first metallization plane on said semiconductor structure;

- providing a first intermediate dielectric on said first metallization plane, said first intermediate dielectric having a first dielectric constant;
- providing a liner layer made of a dielectric material on said first intermediate dielectric, said liner having a second dielectric constant that is greater than the first dielectric constant;
- providing via holes in said first intermediate dielectric and said liner layer, said via holes being filled with a conductive material, thereby completing a first resulting structure;
- providing a second metallization plane on said first resulting structure, said liner layer acting as a diffusion barrier for the second metallization plane;

patterning first and second interconnects in said second metallization plane thereby

forming an interspace between said first and second interconnects; and

completely interrupting said liner layer in said interspace between said first interconnect and said second interconnect such that said liner layer is removed everywhere that the

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second metallization plane is removed, in order to prevent capacitive coupling between said first and second interconnects.

- 22. (Previously Presented) The method as claimed in claim 21, wherein patterning and interrupting are carried out in a common etching step.
- 23. (Previously Presented) The method as claimed in claim 21, further comprising providing an electrical circuit integrated into a silicon substrate.
- 24. (Previously Presented) The method as claimed in claim 23, wherein providing a liner layer comprises fabricating said liner layer from a material selected from the group consisting of silicon dioxide and silicon nitride.
- 25. (Previously Presented) The method as claimed in claim 24, wherein said patterning is carried out in a first metal etching step and said interrupting is carried out in a second silicon dioxide etching step.
- 26. (Previously Presented) The method as claimed in claim 21, further comprising providing a dielectric in said interspace.
- 27. (Previously Presented) The method as claimed in claim 21, further comprising providing a mask on said second metallization plane for use in patterning and interrupting.